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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/034,542

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Senaka Balasuriya

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VEDDER PRICE KAUFMAN & KAMMHOLZ
222 N. LASALLE STREET
CHICAGO, IL 60601

EXAMINER

HARPER, V PAUL

ART UNIT

PAPER NUMBER

2654

22

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,542

Applicant(s)

BALASURIYA, SENAKA

Examiner

V. Paul Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 27 and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Bennett et al. (U.S. Patent 6,701,293), hereinafter referred to as Bennett.

Regarding **claim 27**, Bennet teaches a method for combining the N-Best lists from multiple speech recognizers. Bennet's method includes the following steps:

- providing an audio command to a first speech recognition engine in the terminal device (Fig. 1, item 12, col. 2, lines 32-47),
- wirelessly providing the audio command to at least one second speech recognition engine in the network device (Fig. 3, items 22 and 24; col. 2, lines 55-65, speech recognizer may reside on any device and the connection can be wireless);

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- recognizing the audio command within the first speech recognition engine to generate at least one first recognized audio command, wherein the at least one first recognized audio command has a corresponding first confidence value (col. 1, lines 56-60, commands; col. 4, lines 35-40, confidence);
- recognizing the audio command within the at least one second speech recognition engine, independent of recognizing the audio command by the first speech recognition engine, to generate at least one second recognized audio command, wherein the at least one second recognized audio command has a corresponding second confidence value (col. 1, lines 56-60, commands; col. 4, lines 35-40, confidence);
- wirelessly transmitting the at least one first recognized audio command to a comparator (col. 2, lines 63-64; col. 4, lines 35-38);
- transmitting the at least one second recognized audio command to the comparator (Fig. 1, item 16; Fig. 3, items 26 and 28); and
- selecting at least one recognized audio command having a recognized audio command confidence value from the at least one first recognized audio command and the at least one second recognized audio command based on the at least one first confidence value and the at least one second confidence value (col. 4, lines 34-67).

Regarding **claim 39**, Bennett discloses a system with multiple speech recognizers. Bennett's system includes the following:

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- a terminal speech recognition engine operably coupled to a microphone and coupled to receive an audio command and generate at least one terminal recognized audio command, wherein the at least one terminal recognized audio command has a corresponding terminal confidence value (col. 1, lines 55-63, Fig. 1, col. 2, lines 32-65);
- at least one network speech recognition engine operably coupled to the microphone and coupled to receive the audio command across a wireless transmission from the terminal device to the network device and generate at least one network recognized audio command, independent of the terminal speech recognition engine, wherein the at least one network recognized audio command has a corresponding network confidence value (col. 2, lines 55-65, col. 4, lines 35-45, confidence);
- a comparator disposed on the terminal device, operably coupled to the terminal speech recognition engine operative to receive the at least one terminal recognized audio command from a wireless transmission and further operably coupled to the at least one network speech recognition engine operably coupled to receive the at least one network recognized audio command (Fig. 1, item 16, combiner, col. 1, lines 55-64, command); and
- a dialog manager operably coupled to the comparator, wherein the comparator selects at least one recognized audio command having a recognized confidence value from the at least one terminal recognized audio command and the at least one network recognized audio command based on the at least one terminal confidence value and the at least one network confidence value,

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wherein the selected at least one recognized audio command is provided to the dialog manager (Fig. 1, item 16, lines 35-45).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett in view of Scott et al. (U.S. Patent 6,101,473), hereinafter referred to as Scott.

Regarding **claim 28**, Bennett teaches everything claimed, as applied above (see claim 27), but Bennett does not specifically teach "accessing an external content server in response to the at least one recognized audio command to retrieve encoded information therefrom." However, the examiner contends that this concept was well known in the art, as taught by Scott.

In the same field of endeavor, Scott discloses a method for accessing the Internet using a speech recognizer where, for example, a user can get a stock quote over the Internet using a recognizer (Fig. 1, col. 3, lns. 5-10).

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bennett by specifically providing access to the Internet, as taught by Scott, to increase access to information.

Regarding **claim 29**, Bennett in view of Scott teaches everything claimed, as applied above (see claim 28), but Bennett does not specifically teach, (a) "receiving the encoded information from the content server"; and (b) "decoding the encoded information." However, the examiner contends that these concepts were well known in the art, as taught by Scott.

Scott further discloses receiving information over the Internet (col. 3, Ins. 5-10), corresponding to (a), above, where the information received will necessarily require decoding (e.g., interpreting HTML formatted data for display), corresponding to (b), above.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bennett in view of Scott by specifically providing the ability to receive and decode data from the Internet, as taught by Scott, since information from the Internet is widely viewed as being useful.

Regarding **claim 30**, Bennett in view of Scott teaches everything claimed, as applied above (see claim 29). In addition, Bennett teaches "prior to selecting at least one recognized audio command, weighting the at least one first

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confidence value by a first weight factor and weighting the at least one second confidence values by a second weight factor” (col. 6, lines 6-20).

Regarding **claim 31**, Bennett in view of Scott teaches everything claimed, as applied above (see claim 29), but Bennett does not specifically teach that “prior to accessing the content server, executing at least one operation based on the at least one recognized audio command.” However, the examiner contends that this concept was well known in the art, as taught by Scott.

Scott further teaches that a user can tell the speech server to “show me the stock quote” to initiate access to a web page (col. 3, lns. 5-10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bennett in view of Scott by specifically providing content server access, as taught by Scott, for the purpose obtaining information from the Internet.

3. Claims 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett in view of Scott and further in view of Baruch et al. (U.S. Patent Application Publication 2002/0091518 A1), hereinafter referred to as Baruch.

Regarding **claim 32**, Bennett in view of Scott teaches everything claimed, as applied above (see claim 31), but Bennett in view of Scott does not specifically teach “verifying the at least one recognized audio command.”

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However, the examiner contends that these concepts were well known in the art, as taught by Baruch.

In the same field of endeavor, Baruch discloses a voice control system with multiple recognition engines. In addition, Baruch teaches the technique of getting confirmation from the user (§50).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bennett in view of Scott by specifically providing the ability confirm a command, as taught by Baruch, since such confirmation is critical in many command operations.

4. Claims 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett in view of Baruch.

Regarding **claim 33**, Bennett teaches everything claimed, as applied above (see claim 27), but Bennett does not specifically teach “generating an error notification when the at least one first confidence value and the at least one second confidence values are below a minimum confidence level.” However, the examiner contends that these concepts were well known in the art, as taught by Baruch.

In the same field of endeavor, Baruch discloses a voice control system with multiple recognition engines. In addition, Baruch teaches that if a voice input is not recognized, the system may provide a visual and/or audible message (§40 where when a recognition decision is made based on confidence levels, if

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the results of both recognition units are below their respective minimum confidence levels, an error would result).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bennett, as taught by Baruch, since notification is useful when no recognition has occurred.

5. Claims 34, 36, 37, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett in view of Goldhor and Scott.

Regarding **claim 34**, this claim includes similar steps to those found in claim 1 and is rejected for the same reasons. But Bennett does not specifically teach the step of "inserting the at least one recognized audio command within a form." However, the examiner contends that this concept was well known in the art, as taught by Goldhor.

In the same field of endeavor, Goldhor teaches a report generation method where speech recognition can be used to insert text into a report form (abstract, Fig. 2, col. 1, lines 26-35, lines 60-65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bennett by specifically providing the ability to insert words into a form using speech recognition, as taught by Goldhor, since this approach allows to recognition system to adjust to what is expected in the current entry field (col. 1, lines 30-35).

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In addition, Bennett does not specifically teach the step of “accessing an external content server in response to the at least one recognized audio command to retrieve encoded information therefrom.” However, the examiner contends that this concept was well known in the art, as taught by Scott.

In the same field of endeavor, Scott discloses a method for accessing the Internet using a speech recognizer where, for example, a user can get a stock quotes over the Internet using a recognizer (Fig. 1, col. 3, lns. 5-10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bennett by specifically providing access to the Internet, as taught by Scott, to increase access to information.

Regarding **claim 36**, Bennett in view of Goldhor and Scott teaches everything claimed, as applied above (see claim 34). In addition, Bennett teaches that “prior to selecting the at least one recognized audio command, weighting the at least one terminal confidence value by a terminal weight factor and the at least one network confidence value by a network weight factor” (col. 6, lines 6-20).

Regarding **claim 37**, Bennett in view of Goldhor and Scott teaches everything claimed, as applied above (see claim 34). In addition, Bennett teaches:

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- filtering the at least one recognized audio command based on the at least one recognized audio command confidence value (col. 4, lines 34-46, return top results);
- executing an operation based on the recognized audio command having the highest recognized audio command confidence value (col. 1, lines 57-59).

Regarding **claim 40**, Bennett teaches everything claimed, as applied above (see claim 39). Bennett teaches “a dialog manager audio command determined by the dialog manager from the at least one recognized audio commands based on the at least one recognized audio command confidence levels ...” (Fig. 1, item 16, lines 35-45), but Bennett does not specifically teach “...such that the dialog manager inserts the dialog manager command within a form.” However, the examiner contends that this concept was well known in the art, as taught by Goldhor.

In the same field of endeavor, Goldhor teaches a report generation method where speech recognition can be used to insert text into a report form (abstract, Fig. 2, col. 1, lines 26-35, lines 60-65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bennett by specifically providing the ability to insert words into a form using speech recognition, as taught by Goldhor, since this approach allows to recognition system to adjust to what is expected in the current entry field (col. 1, lines 30-35).

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In addition, Bennett does not specifically teach that “the dialog manager being operably coupleable to an external content server such that the operation executed by the dialog manager includes accessing the external content server to retrieve encoded information therefrom.” However, the examiner contends that this concept was well known in the art, as taught by Scott.

In the same field of endeavor, Scott discloses a method for accessing the Internet using a speech recognizer where, for example, a user can get a stock quotes over the Internet using a recognizer (Fig. 1, col. 3, Ins. 5-10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bennett by specifically providing access to the Internet, as taught by Scott, to increase access to information.

Regarding **claim 41**, Bennett in view of Goldhor and Scott teaches everything claimed, as applied above (see claim 40), but Bennett does not specifically teach “wherein the dialog manager retrieves the encoded information from the content server in response to the dialog manager audio command.” However, the examiner contends that this concept was well known in the art, as taught by Scott.

Scott further discloses a method for accessing the Internet using a speech recognizer where, for example, a user can get a stock quotes over the Internet using a recognizer (Fig. 1, col. 3, Ins. 5-10).

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch by specifically providing access to the Internet, as taught by Scott, to increase access to information.

6. Claims 35, 38 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett in view of Goldhor and Scott and further in view of Baruch.

Regarding **claim 35**, Bennett in view of Goldhor and Scott teaches everything claimed, as applied above (see claim 34), but Bennett does not specifically teach "prior to accessing a content server, generating an error notification when the at least one terminal confidence value and the at least one network confidence value are below a minimum confidence level." However, the examiner contends that these concepts were well known in the art, as taught by Baruch.

In the same field of endeavor, Baruch discloses a voice control system with multiple recognition engines. In addition, Baruch teaches that if a voice input is not recognized, the system may provide a visual and/or audible message (¶40 where when a recognition decision is made based on confidence levels, if the results of both recognition units are below their respective minimum confidence levels, an error would result).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bennett in view of Goldhor and

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Scott, as taught by Baruch, since notification is useful when no recognition has occurred.

Regarding **claim 38**, Bennett in view of Goldhor and Scott do not specifically teach “verifying the at least one recognized audio command to generate a verified recognized audio command.” However, the examiner contends that these concepts were well known in the art, as taught by Baruch.

In the same field of endeavor, Baruch discloses a voice control system with multiple recognition engines. In addition, Baruch teaches the technique of getting confirmation from the user (§50).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bennett in view of Goldhor and Scott by specifically providing the ability confirm a command, as taught by Baruch, since such confirmation is critical in many command operations.

Furthermore, Bennett teaches “executing an operation based on the verified recognized audio command” (col. 1, lines 57-59 where a command is followed by an operation).

Regarding **claim 42**, Bennett in view of Goldhor and Scott teaches everything claimed, as applied above (see claim 41), But Bennett does not specifically teach “a speech synthesis engine operably coupled to the dialog manager, wherein the speech synthesis engine receives speech encoded information from the dialog manager and generates speech formatted

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information; and a speaker operably coupled to the speech synthesis engine, wherein the speaker receives the speech formatted information and provides an output message." However, the examiner contends that these concepts were well known in the art, as taught by Baruch.

In the same field of endeavor, Baruch discloses a voice control system with multiple recognition engines. In addition, Baruch teaches that a list of requested languages may be provided by loudspeaker (¶44).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bennett in view of Goldhor and Scott by specifically providing the ability to receive an audio response over a loudspeaker, as taught by Baruch, since audio communication is in some cases the best way to communicate such information (e.g. a telephone).

Response to Arguments

Applicant's arguments with respect to claims 27-42 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306

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Hand-delivered responses should be brought to:

Crystal Park II
2121 Crystal Drive
Arlington, VA.
Sixth Floor (Receptionist)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. V. Paul Harper whose telephone number is (703) 305-4197. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (703) 305-9645. The fax phone number for the Technology Center 2600 is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service office whose telephone number is (703) 306-0377.



VPH/vph
August 3, 2004



RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER